



Queen Margaret University
EDINBURGH

Information Sheet for Children Aged 11 and Over

Ultrasound for Speech Therapy in Children

More information on ultrasound, including pictures and videos, can be found here:

<http://www.qmu.ac.uk/casl/ultra/default.htm>

You are being invited to take part in a research study because your Speech and Language Therapist thinks you might be interested in taking part. It is up to you to decide whether or not you want to take part so please read this information sheet and discuss it with the adult who looks after you. Talk to others about the study if you wish. Contact us if there is anything that is not clear or if you would like more information.

Why are we doing this study?

The aim of this research is to see if we can help children with speech disorders to improve their speech by showing them ultrasound images of their tongue. Ultrasound is a machine used by doctors to see pictures of inside the body. For this project we will place an ultrasound probe under your chin to look at the movements of your tongue when you speak. We will use this to show you how to make speech sounds correctly.



A picture of the ultrasound setup showing a child wearing the ultrasound headset and ultrasound images of the tongue on a computer screen

Do I have to take part?

No, it is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a form to say we have your permission to record you. If you decide to take part you can still change your mind at any time without giving a reason but we will keep any information you have previously provided. Deciding not to take part or

withdrawing from the study will not affect the speech and language therapy you receive from your regular Speech and Language Therapist.

What will happen if I take part?

- You will be asked to come to Queen Margaret for a speech assessment for us to check whether or not you are suitable for the study, if so, we will offer you 10 sessions of therapy designed to help make your speech clearer and easier to understand and up to 5 further assessment sessions.
- During the sessions you will sit in front of a computer screen in small room. We use a headset (see picture) to hold the ultrasound in place. The end of the ultrasound probe will be covered in a type of jelly which helps us to get a clear picture of your tongue. A microphone and video camera will be attached to the headset, to record your voice and make a video of your lips when you speak. Sometimes we might ask if it is ok (you may say no) to make videos of the whole therapy session, in which case your face would be filmed. The Speech & Language Therapist will be with you during each session and will help you if necessary.
- You will be asked to copy sounds, words and sentences and possibly drink a few sips of water. You will also be asked to look at the live image of your own tongue moving and think about changing the way it moves. We will record these tongue movements.
- Each session will take about 1hr, but this includes rest breaks if you would like them and we will do a variety of activities and games.
- You will have to travel to Queen Margaret University for the assessment and therapy but we will try to arrange appointments at a time that suits you.

This diagram shows the number of sessions required over roughly a six month time frame:

Week no	Week Number															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	...	26
Purpose	Assess	Assess	Assess	10 Sessions of therapy										Assess		Assess

We will not use your name or any other personal information when we report our findings. However, if some of the sound recordings were played at a presentation (for example to people training to become Speech and Language Therapists), then someone might be able to recognise your voice. If you give us permission to take videos of therapy sessions then your face would be in view and would be easily recognisable.

What are the benefits of taking part?

If you take part in the project you will get an in-depth speech and language assessment and a course of speech therapy which will hopefully help to make your speech clearer and easier to understand. You will receive a £20 gift voucher as a thank you for taking part.

What are the disadvantages of taking part?

We have used ultrasound many times with children as young as six years old. However, the ultrasound headset can start to feel heavy and a little uncomfortable after around 30mins. For this reason, you won't need to wear it for longer than 30mins and you can ask us to take it off at any point for a rest.



The Ultrasound Headset

Another disadvantage of taking part is the hassle of travelling to Queen Margaret University for up to 15 separate visits as unfortunately it will not be possible for the ultrasound equipment to be moved to your home or school.

What happens when the study is finished?

We will write to your mum/dad/person who looks after you, within two months with a report detailing your individual speech skills and telling them how much progress you have made with the ultrasound therapy.

Will taking part in the study be kept confidential?

Yes. All the information we collect during the course of the research will be kept confidential. Your name will be removed from the information so that you cannot be recognised from it. Information will be kept at Queen Margaret University and the University of Strathclyde. With your permission we will inform your Speech and Language Therapist that you are taking part.

Who else will see my information?

In order to participate in the study the ultrasound and voice recordings will be shared with members of the research team for analysis. Results of the analysis will be written up to share with other scientists and members of the public, but this will be in words only, no sound or video recordings. This is all you need to consent to in order to take part.

Optional Information Sharing

We ask you to think about whether you might also give us permission to share your information with students (for teaching purposes) and researchers in other universities across the World. Also, we will ask you to think about whether we can share short ultrasound and voice recordings of you on the internet in a website similar to this one: <http://www.seeingspeech.arts.gla.ac.uk/uti/> . This is entirely optional and you can still be included in the project if you don't want this to happen. If you say it is ok for us to do this we will wait until you are 16 before we upload any information.

How long will you keep my information for?

We will keep the information forever. However, you can write to us or email us at any time in the future if you no longer wish us to analyse your information. We can then destroy it but will not be able to change any articles which have already been published. We will try to write to you when you turn 16 to check that it is still ok for us to keep the information and/or share it with other researchers or on the internet (if you have given permission for this).

What will happen to the results of the study?

The results of the study will be shared with the public, Speech and Language Therapists and scientists via our website, presentations and publications. We will invite you to attend an

information day to tell you about the results of the study towards the end of the project and will post a summary of our findings on our website

Who is organising the research and why?

This study has been organised by Queen Margaret University and the University of Strathclyde and is funded by the Chief Scientist Office of Scotland. The grant runs from April 2015 for 18 months.

It is entirely up to you to decide whether or not to take part in the project. If you do decide to participate, you will be given this information sheet to keep and be asked to sign a consent form. You are free to withdraw from the study at any stage without giving a reason.

If you would like to consult an independent person, who knows about this project but is not involved in it, you are welcome to contact Janet Beck on 0131 474 0000, or jbeck@qmu.ac.uk.

If you have read and understood this information sheet, and you think you might be interested in taking part in the study, please talk to the person who looks after you about it and they will arrange for you to visit Queen Margaret University to meet with the research SLT and make your decision.

Thank you for taking the time to read this information.

Contact details of the researcher:

Name of researcher: Prof Jim Scobbie

Address:

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If you wish to make a complaint about the study please contact NHS Lothian:

NHS Lothian Complaints Team
2nd Floor
Waverley Gate
2-4 Waterloo Place
Edinburgh
EH1 3EG

Tel: 0131 465 5708

ⁱ For this project information is: Audio (sound) recordings of your voice; Ultrasound (video) recordings of your tongue movements; video of your lips moving; results (scores) of speech and language therapy assessments.